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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/940,577

08/29/2001

Jonne Soininen

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09/13/2004

EXAMINER

WANG, LIANG CHE A

PILLSBURY WINTHROP LLP  
1600 TYSONS BOULEVARD  
MCLEAN, VA 22102

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/940,577

Applicant(s)

SOININEN ET AL.

Examiner

Liang-che Alex Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2, 5, 6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-29 have been examined

#### ***Paper Submitted***

2. It is hereby acknowledged that the following papers have been received and placed of record in the file:

- a. **Information Disclosure Statements** in paper number 2, 5 and 6 as received on 08/29/2001, 02/11/2004, 05/19/2004 are considered.

#### ***Claim Objections***

3. Claim 4 is objected to because of the following informalities:
4. Referring to claim 4, lines 4-5, "said agent advertising message" should be changed to "said agent advertisement message" to keep consistency of claim language.  
Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act

of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Leung, US Patent Number 6,195,705.
7. Referring to claim 1, Leung has taught a method of providing macro mobility management for a mobile node in an access system (Col 4 lines 17-28), comprising a plurality of mobile nodes (figure 2b items 6 and 27), a first and a second access node (items 206 and 204) serving said mobile nodes within the first and second parts of the access system (items 214 and 216), respectively, at least one first gateway node (item R1) for interfacing said first part of the access system with external networks (R1 connects 206 to Internet 4), and a first mobility entity (item 202) which is associated with said at least one first gateway node and arranged to provide macro mobility management routing services to the mobile nodes while registered to the first part of the access system, said method comprising steps of establishing a session between one of said plurality of mobile nodes and a second party via said first access node and said first mobility entity (see figure 2B, a session is established between item 202 and item 10 via tem 206, and Col 13 line 64- Col 4 line 16), checking whether there is a second mobility entity (item 208) which is more preferred in respect of routing than said first mobility entity (item 202)(Col 4 lines 27-39) and reacting said checking by

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- a. maintaining a connection to said first mobility entity if there is no second mobility entity which is more preferred than said first one (Col 4 lines 27-39, since the second mobility is a standby agent, the connection would be maintained if the original is operating normally);
  - b. opening a connection to said second mobility entity if said more preferred second mobility entity is available, and initiating macro mobility management registration (Col 4 lines 34-49).
8. Referring to claim 2, Leung has further taught rerouting the session via said second access node in response to a movement of said one of mobile nodes to said second part of the system (Col 4 lines 34-39).
9. Referring to claim 3, Leung has further taught closing the connection to said first mobility entity when said more preferred second mobility entity is available (Col 4 lines 34-39).
10. Referring to claim 4, Leung has further taught wherein said macro mobility management is Internet Protocol-type, or IP-type mobility management (Col 4 line 9, Col 6 line 9 and Col 7 lines 7-9), and wherein an agent advertisement message is sent from said second mobility entity to said one mobile node over said new connection, said agent advertisement message enabling said one mobile node to detect a change of attachment point and to initiate mobile IP registration (Col 4 lines 34-54).
11. Referring to claim 5, Leung has further taught storing in said second access node the identity of said preferred mobility of said second said access node, checking in said second access node, in response to a movement of said one mobile node from said first

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access node to said second access node, whether the identity of said first mobility entity and said stored identity of said preferred mobility entity match or not, maintaining a connection to said first mobility entity if the identity match (figure 2A shows an embodiment when first and second access node (HA1, HA2) both are having the same mobility entity (HAV), Col 3 lines 38-73, and since there is only one mobility entity, connection is maintained), and closing the connection to said first mobility entity and opening a new connection to said preferred mobility entity if said identities do not match (Figure 2B shows HAV1 associated with HA1 is different than HAV2 associated with HA2, Col 4 lines 28-39).

12. Referring to claim 6, Leung has further taught in a radio access system, wherein said steps of closing and opening of the connection comprising steps of closing and opening of a packet protocol context (Col 4 lines 50-54).
13. Referring to claim 7, Leung has further taught transferring the packet protocol contexts of a mobile station which the mobile node is associated with from the first access node the second access node, along with information which indicates which one or ones of the packet radio protocol contexts relate to the macro mobility management, distinguishing the macro mobility management related packet protocol context(s) from possible other packet protocol contexts on the basis of said information at the said second access node, performing said steps of opening and closing solely on the macro mobility management related packet protocol context (Col 4 lines 17-54).
14. Referring to claim 8, Leung has further taught wherein said preferred mobility entity of said second access node is a foreign agent associated with a gateway node in said second

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part of the access network (Figure 2B, standby agent HAV2 could be viewed as an foreign agent to HAV1 since they are separated entities).

15. Referring to claim 9, Leung has further taught wherein said identity includes the address of the mobility entity (Col 7 lines 50-64).
16. Referring to claims 10-20, claims 10-20 encompass the same scope of the invention as that of the claims 1-9. Therefore, claims 10-20 are rejected for the same reason as the claims 1-9.
17. Referring to claims 21-29, claims 21-29 encompass the same scope of the invention as that of the claims 1-9. Therefore, claims 21-29 are rejected for the same reason as the claims 1-9.

### *Conclusion*

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liang-che Alex Wang whose telephone number is (703) 305-8159. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.
19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T Alam can be reached on (703)308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Liang-che Alex Wang *lcw*  
September 7, 2004

*Hosain Alam*  
HOSAIN ALAM  
SUPERVISORY PATENT EXAMINER